

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A ~~high-viscous~~ moulding material suitable for an extrusion blow moulding process and based on at least one thermoplastic polymer selected from the group consisting of polyamides, ~~polyesters~~, polyether esters, polyester amides and mixtures thereof comprising:

- (a) nano-scale fillers in an amount of from 0.5 to 15 wt.-% per 100 parts by weight of the polymer matrix;
- (b) fibrous filling agents in amounts of from 5 to 30 wt.-% per 100 parts by weight of the polymer matrix; and
- (c) impact modifiers in amounts of from 3 to 12 wt.-% per 100 parts by weight of the polymer matrix,

wherein the moulding material has a melt strength of about at least 30% higher than that of a similar moulding material comprising, instead of the nano-scale fillers (a), typical mineral filler materials other than nano-scale fillers.

Claim 2 (previously presented): The moulding material according to claim 1, wherein the nano-scale fillers comprise from 2 to 10 wt.-% per 100 parts by weight of the polymer matrix in the moulding material.

Claim 3 (previously presented): The moulding material according to claim 1, wherein the nano-scale fillers comprise from 4 to 6 wt.-% per 100 parts by weight of the polymer matrix in the moulding material.

Claim 4 (previously presented): The moulding material according to claim 1, wherein the fibrous filling agents comprise from 5 to about 20 wt.-% per 100 parts by weight of the polymer matrix in the moulding material.

Claim 5 (previously presented): The moulding material according to claim 1, wherein the fibrous filling agents comprise from 5 to about 15 wt.-% per 100 parts by weight in the moulding material.

Claim 6 (canceled):

Claim 7 (previously presented): The moulding material according to claim 1, wherein the nano-scale fillers are selected from the group consisting of oxides, semi-metal oxides, and oxide hydrates.

Claim 8 (currently amended): The moulding material according to claim 7, wherein the nano-scale fillers are selected from the group consisting of the oxides and oxide hydrates of an element selected from the group consisting of boron, ~~aluminium~~ aluminum, magnesium, calcium, gallium, indium, silicon, germanium, tin, titanium, zirconium, zinc, yttrium, iron and talc.

Claim 9 (previously presented): The moulding material according to claim 8, wherein the nano-scale fillers are selected from the group consisting of silicon dioxide and silicon dioxide hydrates.

Claim 10 (previously presented): The moulding material according to claim 1, wherein the polyamide moulding material in the polyamide matrix comprises a uniformly dispersed, layered mineral as filler having a layer thickness of 0.7 to 1.2 nm and an interlayer separation of the mineral layers of up to 5 nm prior to being incorporated in the polyamide matrix.

Claim 11 (previously presented): The moulding material according to claim 1, comprising a mineral uniformly dispersed in the polymer matrix having a cation exchange capacity of from 0.5 to 2 meq/g mineral.

Claim 12 (previously presented): The moulding material according to claim 1, comprising a mineral treated by an activating or modifying agent selected from the group consisting of triazines, the ammonium salts of primary amines having at least 6 carbon atoms, quaternary ammonium compounds, ammonium salts of α -, ω -amino acids having at least 6 carbon atoms, sulfonium salts and phosphonium salts.

Claim 13 (previously presented): The moulding material according to claim 1, wherein the nano-scale fillers are layered silicates selected from the group consisting of montmorillonite, saponite, beidellite, nontronite, hectorite, stevensite, vermiculite, illite, pyrosite, the group of the kaoline and serpentine minerals, double hydroxides, graphite, and such fillers on basis of silicones, silica, and silsesquioxanes.

Claim 14 (previously presented): The moulding material according to claim 1, comprising a mineral treated by an adhesion promoter and the adhesion promoter comprises up to 2 wt.-% of the moulding material per 100 parts by weight of the polymer matrix.

Claim 15 (currently amended): The moulding material according to claim 1, wherein the (co)polyamides are ~~polymerides~~ selected from the group consisting of aliphatic C₆-C₁₂ lactams and ω -amino acids having 4 to 44 carbon atoms, or copolymers, obtainable from the polycondensation of at least one diamine from the group of the aliphatic diamines having 4 to 12 C atoms, the cycloaliphatic diamines having 7 to 22 C atoms and the aromatic diamines having 6 to 22 C atoms in combination with at least one dicarboxylic acid from the group of aliphatic dicarboxylic acids having 4 to 12 C atoms, cycloaliphatic dicarboxylic acids having 8 to 24 C atoms and aromatic dicarboxylic acids having 8 to 20 C atoms.

Claim 16 (previously presented): The moulding material according to claim 15, wherein the ω -amino acids and the lactams are selected from the group consisting of ϵ -aminocaproic acid, 11-aminoundecanoic acid, 12-aminododecanoic acid, ϵ -caprolactam, enanthlactam, and ω -laurinlactam.

Claim 17 (previously presented): The moulding material according to claim 15, wherein the diamines are selected from the group consisting of 2,2,2,4 or 2,4,4-trimethylhexamethylenediamin, 1,3- or 1,4-bis(aminomethyl)cyclohexane, bis(p-aminocyclohexyl)methane, m- or p-xylylenediamine, 1,4-diaminobutane, 1,6-diaminohexane, 1,10-diaminodecane, 1,12-diaminododecane, and cyclohexyldimethyleneamine, and the dicarboxylic acids are selected from the group consisting of succinic acid, glutaric acid, adipic acid, suberic acid, pimelic acid, suberic acid, azelaic acid, sebacic acid, dodecanedicarboxylic acid, 1,6-cyclo-hexanedicarboxylic acid, terephthalic acid, isophthalic acid, and naphthalenedicarboxylic acid.

Claim 18 (previously presented): The moulding material according to claim 1, wherein the polyamides are selected from the group consisting of polyamide 6, polyamide 46, polyamide 6 6, polyamide 11, polyamide 12, polyamide 12 12, polyamide 6 10, polyamide 6 12, polyamide 6 9, polyamide 12 T, polyamide 10 T, polyamide 12 I, polyamide 12 T/12, polyamide 10 T/12, polyamide 12 T/10 6, polyamide 10 T/10 6, polyamide 6/6 6, polyamide 6/6 12, polyamide 6/6 6/6 10, polyamide 6/6 6/12, polyamide 6/6 T, polyamide 6/6 I, polyamide 6T/66, polyamide 12/MACMI, polyamide 66/6I/6T, polyamide MXD6/6 and mixtures, blends or alloys thereof.

Claim 19 (previously presented): The moulding material according to claim 1, wherein additional polymers from the group consisting of the polyesters, polyolefins, polycarbonates, and polyethylene vinyl alcohols are added in amounts of up to 30 wt.-% to the moulding materials.

Claim 20 (previously presented): The moulding material according to claim 1, comprising additives selected from the group consisting of the UV and heat stabilizers, antioxidant agents, pigments, dyes, nucleation agents, crystallization accelerators, crystallization retardants, flow assistants, lubricants, release agents, flame retardants, and agents improving the electrical conductivity.

Claim 21 (previously presented): The moulding material according to claim 1, wherein the fibrous filling agents are glass fibers.

Claim 22 (previously presented): The moulding material according to claim 1, wherein the impact modifiers are polyolefins grafted by acrylic acid and maleic anhydride.

Claim 23 (currently amended): A method for producing moulding materials comprising the steps of

melting polymers selected from the group consisting of polyamides, ~~polyesters~~, polyether esters, polyester amides and mixtures thereof; and

compounding nano-scale fillers in an amount of from 0.5 to 15 wt.-% per 100 parts by weight of the polymer matrix, fibrous filling agents in amounts of from 5 to 30 wt.-% per 100 parts by weight of the polymer matrix and impact modifiers in amounts of from 3 to 12 wt.-% per 100 parts by weight of the polymer matrix by an extrusion method to produce a ~~high-viscous~~ moulding material having a melt strength of about at least 30% higher than that of a similar moulding material comprising, instead of the nano-scale fillers, typical mineral filler materials other than nano-scale fillers.

Claim 24 (previously presented): The method according to claim 23, wherein the moulding materials are produced in a double screw extruder at temperatures of between 240°C to 350°C.

Claim 25 (currently amended): A method for producing a ~~high-viscous~~ moulding material suitable for an extrusion blow moulding process and based on at least one thermoplastic polymer selected from the group consisting of polyamides, ~~polyesters~~, polyether esters, polyester amides and mixtures thereof, and including:

(a) nano-scale fillers in an amount of from 0.5 to 15 wt.-% per 100 parts by weight of the polymer matrix,

(b) fibrous filling agents in amounts of from 5 to 30 wt.-% per 100 parts by weight of the polymer matrix, and

(c) impact modifiers in amounts of from 3 to 12 wt.-% per 100 parts by weight of the polymer matrix, wherein the moulding material has a melt strength of about at least 30% higher than that of a similar moulding material comprising, instead of the nano-scale fillers (a), typical mineral filler materials other than nano-scale fillers, said method comprising

performing a melt intercalation, wherein the thermoplastic, the nano-scale fillers (a), the fibrous filling agents (b), and the impact modifiers (c) are mixed at temperatures in the range of from 160 to 350°C, and wherein up to 30 wt.-% of a liquid is injected into the melt.

Claim 26 (currently amended): A method for producing a moulded article, hollow body, semi-finished product, plate, or pipe comprising the step of using a ~~high-viscous~~ moulding material suitable for an extrusion blow moulding process and based on at least one thermoplastic polymer selected from the group consisting of polyamides, ~~polyesters~~, polyether esters, polyester amides and mixtures thereof, and including:

(a) nano-scale fillers in an amount of from 0.5 to 15 wt.-% per 100 parts by weight of the polymer matrix,

(b) fibrous filling agents in amounts of from 5 to 30 wt.-% per 100 parts by weight of the polymer matrix, and

(c) impact modifiers in amounts of from 3 to 12 wt.-% per 100 parts by weight of the polymer matrix, wherein the moulding material has a melt strength of about at least 30% higher than that of a similar moulding material comprising, instead of the nano-scale fillers (a), typical mineral filler materials other than nano-scale fillers.

Claim 27 (previously presented): The method according to claim 26, wherein the hollow body is a bottle.

Claim 28 (currently amended): A moulded article comprising a ~~high-viscous~~ moulding material suitable for an extrusion blow moulding process and based on at least one thermoplastic polymer selected from the group consisting of polyamides, ~~polyesters~~, polyether esters, polyester amides and mixtures thereof, and including:

- (a) nano-scale fillers in an amount of from 0.5 to 15 wt.-% per 100 parts by weight of the polymer matrix,
- (b) fibrous filling agents in amounts of from 5 to 30 wt.-% per 100 parts by weight of the polymer matrix, and
- (c) impact modifiers in amounts of from 3 to 12 wt.-% per 100 parts by weight of the polymer matrix, wherein the moulding material has a melt strength of about at least 30% higher than that of a similar moulding material comprising, instead of the nano-scale fillers (a), typical mineral filler materials other than nano-scale fillers.

Claim 29 (previously presented): The method for producing a moulded article according to claim 27 comprising the use of a step chosen from the group consisting of coextrusion, extrusion blow moulding, compression moulding and sheating methods.

Claim 30 (canceled):

Claim 31 (previously presented): The moulding material according to claim 1, comprising a mineral uniformly dispersed in the polymer matrix having a cation exchange capacity of from 0.7 to 0.8 meq/g mineral.

Claim 32 (previously presented): The moulding material according to claim 12, wherein the ammonium salts of primary amines having at least 6 carbon atoms are selected from the group consisting of hexane amine, decane amine, dodecane amine, stearyl amine, and hydrated fatty acid amines.

Claim 33 (previously presented): The moulding material according to claim 21, wherein the glass fibers are E glass fibers.

Claim 34 (previously presented): The moulding material of claim 22, wherein the polyolefins are grafted by a rubber selected from the group consisting of ethylene-propylene rubbers (EPM), ethylene-propylene-diene rubbers (EPDM) and acrylate rubbers.

Claim 35 (previously presented): The method for producing moulding material according to claim 25, wherein the liquid comprises water.